

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 82-4 .

NPDES PERMIT NO. CA0038342

WASTE DISCHARGE REQUIREMENTS FOR:

EAST BAY MUNICIPAL UTILITY DISTRICT
ORINDA FILTER PLANT
ORINDA, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. East Bay Municipal Utility District, Orinda Filter Plant, hereinafter called the discharger, by application dated April 21, 1981, has applied for renewal of waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.
2. The Orinda Filter Plant is located in Orinda, Contra Costa County, on the edge of San Pablo Creek about 6000 feet upstream (southeast of) the point where San Pablo Creek enters San Pablo Reservoir. Both San Pablo Creek and San Pablo Reservoir are waters of the United States. The Orinda Filter Plant currently discharges into the creek at the two points adjacent to the plant. The wastes are as follows:

Wastes 001 consists of raw water leakage and filter backwash water produced during the treatment of an average of 135 mgd of municipal water supply. Currently waste 001 amounts to an average of 6 MGD when no coagulation is being done, and 11 MGD with alum coagulation. Maximum flows reach 15 mgd.

Waste 002 consists of an average of about 30 MGD and maximum of 150 MGD of Mokelumne River water which is diverted into San Pablo Creek for the purpose of replenishing San Pablo Reservoir.

3. The Board on September 21, 1976 adopted Order No. 76-93 (NPDES Permit No. CA0038342) revising and reissuing waste discharge requirements for the discharger.
4. The Board, in April 1975 adopted a Water Quality Control Plan for the San Francisco Bay Basin. The Plan contains water quality objectives for San Pablo Creek.
5. The beneficial uses of San Pablo Creek, San Pablo Reservoir, and contiguous waters are:
 - a. Recreation.
 - b. Fish migration and habitat.

- c. Habitat and resting for waterfowl and migratory birds.
 - d. Municipal water supply
 - e. Esthetic enjoyment.
6. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
 7. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
 8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that East Bay Municipal Utility District, Orinda Filter Plant, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

<u>Waste</u>	<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
a. 001	Total Suspended Solids	lbs/day	3750	5630
		kg/day	1710	2560
		mg/l	30	45
b. 001 & 002	Chlorine Residual	mg/l	-	0.0

2. Waste 001 and 002 shall not have a pH of less than 6.5 nor greater than 8.5, unless the raw influent water being filtered has a pH greater than 8.5, in which case the waste shall not have a pH greater than that of the influent water.
3. For any representative set of samples, Waste 001 and Waste 002 as discharged shall meet the following limit of toxicity:

The survival of a test organism acceptable to this Regional Board in 96-hour bioassays of the effluent as discharged shall achieve a median of 90% survival for three consecutive samples

and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

B. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature or apparent color beyond present natural background levels;
 - d. Increased turbidity so as to cause nuisance or impair beneficial uses;
 - e. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - f. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in San Pablo Creek:
 - a. Dissolved oxygen 5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. Dissolved sulfide 0.1 mg/l maximum.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 76-93, adopted by the Board on September 21, 1976. Order No. 76-93 is hereby rescinded.
2. The discharge of Waste 001 during daylight hours shall be minimized to the extent feasible.
3. The effluent limitations specified in A.1.a. shall not apply during wet weather months when the monthly average turbidity of San Pablo Creek downstream from the waste discharges does not exceed that of the stream at a point immediately upstream from the discharges.
4. The discharger shall comply with all sections of this Order immediately.
5. This Order includes all items of the attached "Standard Provisions, Reporting Requirements, and Definitions," April 1977, except B.2, B.5.
6. This Order expires on February 17, 1987 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
7. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 17, 1982.

FRED H. DIERKER
Executive Officer

Attachment:

Standard Provisions, Reporting
Requirements and Definitions - April 1977
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

East Bay Municipal Utility District

Orinda Filter Plant

Orinda, Contra Costa County

NPDES NO. CA 0038342

ORDER NO. 82-4

CONSISTS OF

PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INTAKE

<u>Station</u>	<u>Description</u>
I-1	At any point in the raw water supply prior to any treatment.

B. EFFLUENT

E-001	At any point in the outfall pipe to discharge 001 between the point of discharge into San Pablo Creek and the point at which all waste tributary to that outfall is present.
E-002	At any point between the Mokelumne Aqueduct diversion structure, and the point where the Mokelumne water actually enters the Creek.

C. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in the center of San Pablo Creek, located at least 20 feet upstream from the point of any waste discharges.
C-2	At a point in San Pablo Creek, located at least 75 feet downstream from the point of discharge.

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given as Table I.

B. Modifications:

1. This program does not include the following paragraphs of Part A:

C.1, C.3, C.4, C.5.a(5), C.5.c, C.5.d, C.5.e, D.1, D.3.b, D.4, E.2, E.3, F.1, F.3.g.(2).

2. This program includes the following modifications to Part A:

(a) Paragraph D.2.a: Delete "on days coincident with influent composite sampling, or."

(b) Paragraph F.2: Delete the first two sections
pertaining to bypassing and technical reports.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing
Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in
this Regional Board's Resolution No. 73-16 in order to obtain
data and document compliance with waste discharge requirements
established in Regional Board Order No. 82-04.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date
upon written notice from the Executive Officer or request from
the discharger and revisions will be ordered by the Executive
Officer.

FRED H. DIERKER
Executive Officer

Attachment:
Table I

Date Ordered _____

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	E-001		E-002		All C Sta.	I		
TYPE OF SAMPLES	Cont	G	Cont	G				
Flow Rate (mgd)	Cont		Cont					
Chlorine Residual (mg/l)		(1) 2/W		2/W				
Fish Toxicity, 96-hour % Survival in undiluted waste		Q						
pH (Units)		2/W		2/W	2W	2W		
Turbidity (Nephelometric Turbidity Units)		2W			2W	2W		
All Applicable Standard Observations		2/W		2/W	2W	2W		
Settleable Matter ml/l		2/W			M	M		
Total Suspended Solids mg/l & lbs/day		2/W						

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours
(used when discharge does not
continue for 24-hour period)
Cont = continuous sampling
DI = depth-integrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurrence
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = once in March and
once in September
Q = quarterly, once in
March, June, Sept.
and December

2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous

(1) On each sampling day, two grabs shall be analyzed - one during backwash and one between backwashes.